PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0551-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

obstitute for form 1449A/PTO

Examiner

Signature

& RADEMAS

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet 1 of

Complete if Known					
Application Number	10/807,500				
Filing Date	March 24, 2004				
First Named Inventor	Eberhard WEIHE				
Art Unit	1645				
Examiner Name	Unassigned				
Attorney Docket Number	029310.53352US				

	FOREIGN PATENT DOCUMENTS							
Examiner Initials'	Cite No.'	Foreign Patent Document Country Code 3-Number 4-Kind Code 3 (il known) WO 96/34288	Publication Date MM-DD-YYYY 10-31-1996	Name of Patentee or Applicant of Cited Document Eli Lilly and	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τ°		
V	AA /	VVO 90/34200	10-31-1990	Company				
~	AВ	WO 02/08384	01-31-2002	The Regents of the University of California				

	NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
L	AG	YASUO AIHARA ET AL., "Molecular Cloning of a Novel Brain-Type Na* - Dependent Inorganic Phosphate Cotransporter", Journal of Neurochemistry, 2000, Vol. 74, No. 6, Philadelphia, PA, USA					
d	AD	ARMEN N. AKOPIAN ET AL., "A Tetrodotoxin-Resistant Voltage-Gated Sodium Channel Expressed by Sensory Neurons", Letters to Nature, January 18, 1996, pp. 257-262, Vol. 379					
L	AE	HIROSHI BABA ET AL., "Peripheral Inflammation Facilitates A\$ Fiber-Mediated Synaptic Input to the Substantia Gelatinosa of the Adult Rat Spinal Cord", The Journal of Neuroscience, January 15, 1999, pp. 859-867, 19, 2, Society for Neuroscience					
2	AP	DAVID BAUER ET AL., "Identification of Differentially Expressed mRNA Species by an Improved Display Techniques (DDRT-PCR)", Nucleic Acids Research, 1993, pp. 4272-4280, Vol. 21, No. 18, Oxford University Press					
9	AG	ELIZABETH E. BELLOCCHIO ET AL., "Uptake of Glutamate into Synaptic Vesicles by an Inorganic Phosphate Transporter", Science, August 11, 2000, pp. 957-960, Vol. 289, www.sciencemag.org	<i>5</i> 8175 2				
\	AH	JAMES A. BONINI ET AL., "Molecular Cloning and Tissue Expression of a Novel Orphan G Protein-Coupled Receptor from Rat Lung", Biochemical and Biophysical Research Communications, 1997, pp. 190-193, 234, Article no. RC976591, Academic Press					

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date

Considered

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

				Complete if Known			
Substitute for form 1449B/PTO				Application Number	10/807,500		
I K	IEODMATION D	וופרו חפוו	DE	Filing Date	March 24, 2004		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				First Named Inventor	Eberhard WEIHE		
3	IA/EMENT BI	ALL FIGA		Art Unit	1645		
	(use as many sheets	as necessary)	Examiner Name	Unassigned		
Sheet	2	of	4	Attorney Docket Number	029310.53352US		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
V	Al	CHIH-CHENG CHEN ET AL., "A P2X Purinoceptor Expressed by a Subset of Sensory Neurons", Letters to Nature, October 5, 1995, pp. 428-431, Vol. 377	
V	AJ	TERENCE J. CODERRE ET AL., "Contribution of Central Neuroplasticity to Pathological Pain: Review of Clinical and Experimental Evidence", Pain, 1993, pp. 259-285, 52, Elsevier Science Publishers B.V.	
9/	AK	ANTHONY DICKENSON ET AL., "Novel Pharmacological Targets in the Treatment of Pain", Pain Reviews, 1995, pp. 1-12, 2, Edward Arnold	
V	AL	DAVID DUBUISSON ET AL., "The Formalin Test: A Quantitative Study of the Analgesic Effects of Morphine, Meperidine, and Brain Stem Stimulation in Rats and Cats", Pain, 1977, pp. 161-174, 4, Elsevier/North-Holland Biomedical Press	
~	АМ	YUN FENG ET AL., "Cloning of a Novel Member of the G Protein-Coupled Receptor Family Related to Peptide Receptors ¹ ", Biochemical and Biophysical Research Communications, 1997, pp. 651-654, 231, Article No. RC976161, Academic Press	
V	AN	TATSUO FURUKAWA ET AL., "Identification of New Genes Expressed in a Human Erythroleukemia Cell Line", Blood Cells, Molecules and Diseases, 1996, pp. 11-22, 22, 2, The Blood Cells Foundation, LaJolla, California, USA	
a/	AO	P.G. GUNASEKAR ET AL., "NMDA Receptor Activation Produces Concurrent Generation of Nitric Oxide and Reactive Oxygen Species: Implication for Cell Death", Journal of Neurochemistry, 1995, p. 2016-2021, Vol. 65, No. 5, Lippincott-Raven Publishers, Philadelphia, Pennsylvania, USA	
V	AP	BRIAN E. HAWES ET AL., "Nociceptin (ORL-1) and μ -Opioid Receptors Mediate Mitrogen-Activated Protein Kinase in CHO Cells Through a G_i -Coupled Signaling Pathway: Evidence for Distinct Mechanisms of Agonist-Mediated Desensitization", Journal of Neurochemistry, 1998, pp. 1024-1033, Vol. 71, No. 3, International Society of Neurochemistry, Lippincott-Raven Publishers, Philadelphia, Pennsylvania, USA	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

Examiner

Signature

Date

Considered

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

		-	_	Complete if Known			
Substitute for form 1449B/PTO				Application Number	10/807,500		
	INFORMATION DI	SCI 081	IDE	Filing Date	March 24, 2004		
	STATEMENT BY			First Named Inventor	Eberhard WEIHE		
	STATEMENT DI	AFFEIO/	7111	Art Unit	1645		
	(use as many sheets a	s necessa	rv)	Examiner Name	Unassigned		
Sheet	3	of	4	Attorney Docket Number	029310.53352US		

		NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), little of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
2	AQ	M. HUBANK ET AL., "Identifying Differences in mRNA Expression by Representational Difference Analysis of cDNA", Nucleic Acids Research, 1994, pp. 5640-5648, Vol. 22, No. 25				
V	ÁR	SVEN KLUßMANN ET AL., "Mirror-Image RNA that Binds D-Adenosine", Nature Biotechnology, September 1996, pp. 1112-1115, Vol. 14				
4/	AS	LING-YUAN LI ET AL., "The Stimulatory Effect of Opioids on Mitrogen-Activated Protein Kinase in Chinese Hamster Ovary Cells Transfected to Express µ-Opioid Receptors", Molecular Pharmacology, 1996, pp. 599-602, 50, The American Society for Pharmacology and Experiential Therapeutics				
2	AT	PENG LIANG ET AL., "Differential Display of Eukaryotic Messenger RNA by Means of the Polymerase Chain Reaction", Science, August 14, 1992, pp. 967-971, Vol. 257				
V	Att	AXEL METHNER ET AL., "A Novel G Protein-Coupled Receptor with Homology to Neuropeptide and Chemoattractant Receptors Expressed during Bone Development", Biochemical and Biophysical Research Communications, 1997, pp. 336-342, 233, Article no. RC976455, Academic Press				
V	AV	ABDI A. MOHIT ET AL., "p49 ^{3F12} Kinase: A Novel MAP Kinase Expressed in a Subset of Neurons in the Human Nervous System", Neuron, January 1995, pp. 67-78, Vol. 14, Cell Press				
\sim	AW	D. NOHR et al., "Calcitron Gene-Related Peptide Gene Expression in Collagen-Induced Arthritis is Differentially Regulated in Primary Afferents and Motoneurons: Influence of Glucocorticoids", Neuroscience, 1999, pp. 759-773, Vol. 93, No. 2, Elsevier Science Ltd., Great Britain				
V	ΑX	S. PERSSON ET AL., "Spinal Prodynorphin Gene Expression in Collagen-Induced Arthritis: Influence of the Glucocorticosteroid Budesonide", Neuroscience, 1994, pp. 313-326, Vol. 63, No. 1, Elsevier Science Ltd., Great Britain				
Examiner	T	Date 17 / 15/2	06			
Signature	1	Considered	Ø			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office. U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

				Complete if Known				
Substitute for form 14498/PTO				Application Number	10/807,500			
	INFORMATION D	ופכו מפווו	DE	Filing Date	March 24, 2004			
	•	ATEMENT BY APPLICANT		First Named Investor		First Named Inventor	Eberhard WEIHE	
	STATEMENT BI	AI I LIUA	17 1	Art Unit	1645			
	(use as many sheets	as necessary)	Examiner Name	Unassigned			
Sheet	4	of	4	Attorney Docket Number	029310.53352US			

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
V	AY	G.MC. POIRIER ET AL., "Screening Differentially Expressed cDNA Clones Obtained by Differential Display Using Amplified RNA", Nucleic Acids Research, 1997, pp. 913-914, Vol. 25, No. 4, Oxford University Press	
V	AZ	LAUREN SOMPAYRAC ET AL., "Overcoming Limitations of the mRNA Differential Display Technique", Nucleic Acids Research, 1995, pp. 4738-4739, Vol. 23, No. 22, Oxford University Press	
N	ВА	SHIGEO TAKAMORI ET AL., "Identification of a Vesicular Glutamate Transporter that Defines a Glutamatergic Phenotype in Neurons", Letters to Nature, September 2000, pp. 189-194, Vol. 407, 2000 Macmillan Magazines Ltd.	
(ВВ	THOMAS R. TÖLLE, "Chronischer Schmerz", 1997	
V	ВС	VICTOR E. VELCULESCU ET AL., "Serial Analysis of Gene Expression", Science, October 20, 1995, pp. 484-487, Vol. 270	
V	BD	JACKSON S. WAN ET AL., "Cloning Differentially Expressed mRNAs", Nature Biotechnology, December 1996, pp. 1685-1691, Volume 14	
2	BE	JOSEPH B. WATSON ET AL., "Differential cDNA Screening Strategies to Identify Novel Stage-Specific Proteins in the Developing Mammalian Brain", Dev. Neurosci., 1993, pp. 77-86, 15	
V	BF	ANDREW F. WILKS, "Two Putative Protein-Tyrosine Kinases Identified by Application of the Polymerase Chain Reaction", Genetics, March 1989, pp. 1603-1607, Vol. 86, Proc. Natl. Acad. Sci., USA	
V	BG	CLIFFORD J. WOOLF ET AL., "Peripheral Nerve Injury Triggers Central Sprouting of Myelinated Afferents", Letters to Nature, January 2, 1992, pp. 75-78, Vol. 355	
V	вн	M. ZIMMERMANN ET AL., "Plasticity of the Nervous System at the Systemic, Cellular and Molecular Levels: a Mechanism of Chronic Pain and Hyperalgesia", Progress in Brain Research, 1996; pp. 233-259, Vol. 110, Chapter 18, Elsevier Science B.V.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). ³Applicant is to place a check mark here if English language Translation is attached.

Considered

Examiner

Signature

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office. U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE on Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. ENTS TRADE Complete if Known Substitute for form 1449A/PTO 10/807,500 **Application Number** INFORMATION DISCLOSURE March 24, 2004 Filing Date STATEMENT BY APPLICANT First Named Inventor **Eberhard WEIHE** Art Unit 1645 Unassigned **Examiner Name** (use as many sheets as necessary) 029310.53352US Attorney Docket Number Sheet

	U.S. PATENT DOCUMENTS							
Examiner Initials'	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
		US-		Document	r igoreo / ppeu/			
·		US-						
		US-						
		US-		-				
		US-		-				
		UŞ-						

	FOREIGN PATENT DOCUMENTS								
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited	Pages, Columns, Lines, Where Relevant Passages	→			
Initials'	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY	Document	or Relevant Figures Appear	יד			

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Initials* No.¹ Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the left (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
2	AA	MICHAEL TAL, "A Novel Antioxidant Alleviates Heat Hyperalgesia in Rats with an Experimental Painful Peripheral Neuropathy", NeuroReport, May 31, 1996, pp. 1382-1384, Vol. 7, No. 8, Rapid Science Publishers			
	AB	VOET, "Post-Translational Modification", Biochemistry, 1st Edition, Chapter 30, Translation, 1990, pp. 935-938, Section 30-5			

			 <u> </u>	
Examiner Signature	7/	S	 Date Considered	12/18/06
	_			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant, 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.